

# Forthright Solutions

28 October 2004

Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St. SW  
Washington, DC 20554

Re: EB Docket 04-296, FCC 04-189, Review of the Emergency Alert System

## **Introduction**

We believe that the current Emergency Alert System, including both the network and public owned receivers, can be improved upon to make it the best system possible to warn the public. There are three issues that need to be addressed:

1. Ubiquitous devices to alert the public
2. Improving the coverage of the National Weather Service weather radio (NWR) system to provide redundancy during emergencies.
3. Promotion of the EAS and NWR alerting to the public

## **Ubiquitous alerting**

We agree with other groups who believe that the EAS must have the ability to reach the public using multiple modes, including at least:

1. Commercial broadcast radio and television
2. Cable radio and television
3. The Internet
4. Cellular and PCS handsets & PDAs through voice, text messaging and/or data
5. Wireline telephones
6. Satellite radio and television
7. Highway alerting signs
8. Pagers
9. National Weather Service broadcast radio
10. Digital receivers with NWR specific area message encoding (SAME) built into consumer electronics

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The public must have a reliable system in order to receive emergency alerts. However, many of the implementations listed above are not suitable for singular use in a crisis situation. Some of the solutions do not have any battery backup or only have a very limited backup. For example, newer television sets with built-in NWR SAME receivers have no battery backup. So users must have a secondary solution as a backup. Even some dedicated alert receivers have only a few hours of battery backup. This is unacceptable for operation during longer term (multi-day) events, such as hurricanes, blizzards, etc., that may cause the loss of commercial power.

Mobile phones have many days of battery life, but the cellular and PCS networks in which they operate typically only have battery backup for 4 to 8 hours. Cellular and PCS networks can have limited penetration inside buildings due to the frequencies used. The various forms of radio and television, and computers with Internet access suffer from the problem that the devices are not turned on at all times and thus not able to receive alerts at all times. Most do not have battery backup. Wire-line phone do not inherently fail when commercial power is lost, but the lines may go down in a storm and some portion of the public has replaced their home phones with mobile handsets. Mobile phones may be in 'silent' or 'meeting' modes where an emergency message will go unnoticed. Highway signs only reach the public in vehicles on main roads and public use of pagers is waning. Many television and radio antennae are collocated and in the worst case, multiple stations would go off the air simultaneously if the tower or transmitter building were damaged.

Standalone NWR alert receivers and some consumer electronics with built-in NWR alert receivers are inherently more capable of warning the public. These devices are designed from the ground up as safety equipment and safety is their sole feature. Devices now under development include security systems (burglar and fire alarm) with integrated SAME alert receivers and the combination of a smoke detector with a SAME alert receiver. NWR receivers and these combination devices will address the problems listed above and each provide a better solution for the public. New features of the combination devices include distributed audio for improved alerting throughout a house, multiple text displays which will speed access to the alert information, extended battery backup for use during extended events, exterior alerting with the siren, and automatic upgrades of new software and location or alert codes. Several of the new features improve access for the impaired community. Professionally installed devices will eliminate the setup, servicing, and other issues that currently frustrate many users of alert receivers. In addition, professional monitoring will provide the customer with assurance of a working unit. The promotion of these types of systems by the security and insurance industries will improve the penetration into the consumer community. The inclusion of alert receivers into widely used consumer electronics is the lowest cost way to provide alerts to the public.

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Widespread acceptance of these devices could someday save the public money spent on community outdoor sirens that have limited coverage and usefulness. This is also the best path for alerting within the business environment where there are few radios and televisions due to poor reception indoors and office restrictions on device usage. Thus, it should be mandatory that SAME alert technology is included in all new residential and business alarm systems.

## **Improved coverage & redundancy for NWR**

The National Weather Service has done an outstanding job by extending the NWR alert system to cover over 90 percent of the population. This should be continued with a future target of reaching at least 95 percent. The coverage should also be expanded in most areas so that each region is covered by at least two stations. This would create redundancy so that in the event that the local NWR station is taken off the air, either by a direct failure (caused by weather, industrial accident, sabotage, jamming, etc.) or by the need to evacuate the station personnel, alert receivers could automatically switch to another local station. Further redundancies should be considered for the data feeds to the transmitters themselves for both local and remote feeds. Additional security may also be warranted to prevent sabotage or to prevent deliberate misinformation from being transmitted.

## **Advertising and promotion of the EAS and NWR to the public**

Weather alert receivers have been around for years. But the public is still very ignorant that they exist, how they increase personal safety, and where to buy them. The EAS and NWR solutions need to be brought into the public's eye whenever possible. They need to be marketed to the public just like any other new product. These products should be evangelized, just like smoke detectors.

Every region that has had an emergency situation should be followed up with press and public service announcements to have the timeliest impact. This should lead the public to buy alert receivers to be prepared for the next event. Every predicted event, such as hurricanes and blizzards, should be preceded by similar messages. Manufacturers and distributors of consumer devices that incorporate alert receivers should receive government support in advertising their devices and benefits to the public.

## **Conclusion**

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The public should have as many methods for receiving the alerts as possible to insure that they are always informed, no matter the circumstances. Due to their inherent advantages, the addition of alert receivers to personal safety electronics should be the foremost priority for manufacturers of consumer electronics. The improvement of the National Weather Service radio network should be one of the highest priorities for the national government.

Regards,

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